

- where F(x) is a force necessary to produce a movement (x),
- x_{s1} is the movement in millimeters produced by a maximum tensile force, and
- x_{s2} is the movement in millimetres produced by a tensile force sufficient to completely separate said surfaces of said supports (C) and (D).--

REMARKS

I. Status of the Claims

Claims 38-106 are pending in this application. Claims 1-37 have been canceled. New claims 38-106 have been added. Support for these claims can be found in claims 1-37 as originally filed. No new matter has been introduced by these new claims, nor do these new claims raise new issues or necessitate the undertaking of any additional search of the art by the Office.

II. Amendment to the Specification

Applicants have amended the specification to correct an inadvertent clerical error. Specifically, Applicants have replaced the term "hydroxyethyl methacrylate" with the term "hydroxypropyl methacrylate." (Specification, page 11, line 20.) Support for this amendment lies in the fact that the term is reasonably conveyed to one of ordinary skill in the art, as explained below.

To comply with the written description requirement of 35 U.S.C. § 112, first paragraph:

It is not necessary that the application describe the claimed invention in ipsis verbis; all that is required is that it reasonably convey to persons skilled in the art that, as of the filing date thereof, the inventor had possession of the subject matter later claimed by him.

In re Edwards, 568 F.2d 1349, 1351-52 (C.C.P.A. 1978) (citations omitted).

The term "hydroxyethyl methacrylate" is listed twice as the result of an inadvertent clerical error. Applicants submit that one of ordinary skill in the art would understand that "hydroxypropyl methacrylate" is reasonably conveyed by the specification, notwithstanding this clerical error. For example, the list reciting the term is structured so as to methodically disclose examples of monomers that can be used. The list begins by disclosing the monomers comprising an ethyl group, and then progresses to monomers comprising a propyl group, and finally to monomers comprising a butyl group. However, Applicants inadvertently recited "hydroxyethyl methacrylate" in place of what one of ordinary skill in the art would have expected to be "hydroxypropyl methacrylate."

Applicants submit that the clerical error identified by Applicants, coupled with the progression of the listing of the monomers in the specification, would reasonably convey to one skilled in the art that "hydroxypropyl methacrylate" is a choice for the vinylidene monomers containing hydroxyl groups (c). Accordingly, no new matter is added by this amendment.

III. Amendments to the Claims

Applicants have canceled claims 1-37 without prejudice or disclaimer and have added new claims 38-106 for the Examiner's consideration. Applicants amended the

claims to clarify the subject matter of Applicants' invention and to overcome the objection of original claims 6-28 and 31-37, which were objected to because of Applicants' use of a multiple-dependent-claiming format. Applicants respectfully submit that no new matter has been introduced by these new claims. Further, Applicants provide comments, below, on a couple of amended claims.

First, Applicants note that claim 86, originally claim 29, now recites the term "soluble" instead of "water-soluble." Support for this amendment can be found in the specification, for example, on page 12, lines 20-22, and further, for example, on page 14, lines 5-9.

Second, Applicants point out that new claims 80 and 81 are directed to molecular weight ranges for the cationic fixing polymers of the invention. In these new claims, Applicants recite that the molecular weight is a "weight-average" molecular weight. Applicants submit that this term is reasonably conveyed by Applicant's specification, page 12, line 23, through page 13, lines 1-8, wherein Applicants also disclose the weight-average molecular weight ranges for the anionic fixing polymers of the invention. One of ordinary skill in the art would understand that the molecular weight ranges for all of the polymers are measured by weight-average molecular weight. Applicants submit that the specification reasonably conveys the term explained above and that no new matter has been introduced by Applicants' new claims.

IV. Rejections Under 35 U.S.C. § 112, Second Paragraph

On pages 2-4 of the present Office Action, the Examiner has rejected original claims 1-5 and 29-30, which correspond with new claims 38-43 and 101-103, under

35 U.S.C. § 112, second paragraph, as indefinite for failing to point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants respectfully traverse this rejection for the reasons detailed below.

In any § 112, second paragraph, the Manual of Patent Examining Procedure ("MPEP") instructs Examiners to determine "whether the claim meets the threshold requirements of clarity and precision, not whether more suitable language or modes of expression are available." M.P.E.P. § 2173.02 (emphasis supplied). Further, Examiners are instructed to "allow claims which define the patentable subject matter with a reasonable degree of particularity and distinctness." *Id.* Therefore, if the scope of the invention can be determined from the language of the claims with a reasonable degree of certainty, then any rejection under 35 U.S.C. § 112, second paragraph, is improper. Applicants respectfully submit that their claims meet this statutory standard for the reasons set forth below. Accordingly, Applicants request the withdrawal of all rejections under § 112, second paragraph.

A. Claim 1

The Examiner has rejected claim 1, which corresponds with new claims 38 and 41, because the term "such as' renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention." (Office Action dated May 22, 2001, page 2, lines 18-20.) Applicants traverse this rejection.

To advance prosecution, however, Applicants have removed the "such as" language from rejected claim 1. Specifically, Applicants have constructed new claim 38 and replaced the phrase "for keratinous fibres such as the hair" with the phrase "for

keratinous fibers." Further, Applicants have constructed new claim 41, which depends from new claim 38, to recite the phrase "wherein said keratinous fibers are chosen from hair." These claims are in accordance with the requirements of § 112, second paragraph, and Applicants respectfully request withdrawal of this reason for rejection.

Additionally, the Examiner has rejected claim 1 because "the colon is confusing." (Office Action dated May 22, 2001, page 2, line 20.) Applicants respectfully disagree and traverse this rejection. Applicants, however, have rendered moot this rejection with new claim 38, which corresponds with original claim 1, by removing the colon. Accordingly, Applicants respectfully request withdrawal of this rejection.

B. Claim 2

The Examiner has rejected claim 2 as indefinite "since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired." (Office Action dated May 22, 2001, page 3, lines 1-10.) The Examiner rejected the claim due to the recitation of one range limitation simultaneously present in the same claim with a narrower range limitation. Applicants have constructed new claims 39 and 40 to recite, individually, each range limitation. Accordingly Applicants respectfully request withdrawal of this rejection.

C. Claim 29

The Examiner has rejected claim 29 as reciting improper language and, further, as confusing. (Office Action dated May 22, 2001, page 3, lines 11-16.) Applicants respectfully traverse for the following reasons.

1. The term "chosen from" is proper in Markush language

The Examiner has rejected claim 29 "for the improper use of 'comprising' instead of 'consisting of' in the Markush group of the claim." (Office Action dated May 22, 2001, page 3, lines 11-13.)

Claim 29 has been canceled in favor of new claims 86 and 87. The rejected language of claim 29, Applicants' recitation of the term "comprising," has been amended to recite "chosen from" instead. Applicants submit that this language clearly sets forth the metes and bounds of the claims, and therefore meets the requirements of § 112, second paragraph.

The case cited by the Examiner, *Ex parte Dotter*, 12 U.S.P.Q. 382 (Pat. & Tr. Office Bd. App. 1931), is legal authority against use of the specific term "comprising" in Markush language. *Dotter* does not state that an applicant must use the phrase "consisting of" to render the Markush language proper. As new claim 87 does not recite the term "comprising," and as "comprising" does not equate to "chosen from" as is used by Applicants in the present case, *Dotter* no longer applies. Accordingly, Applicants respectfully request withdrawal of this rejection.

2. <u>Claim 87, originally claim 29, is not confusing</u>

Additionally, the Examiner has rejected claim 29 as "confusing in that it is unclear if 'polymers based on a vinylpyrrolidone and vinylcaprolactam monomer' represents two distinct homopolymers or one copolymer requiring both vinylpyrrolidone and vinylcaprolactam monomeric components." (Office Action dated May 22, 2001, page 3, lines 13-16.) Applicants respectfully traverse this rejection, however, Applicants have

canceled claim 29 in favor of new claims 86 and 87 to make the subject matter even more clear.

Specifically, Applicants have constructed claim 87 to recite "wherein said soluble polymer is chosen from silicone-containing acrylic polymers, polymers formed from at least one vinylpyrrolidone monomer, and polymers formed from at least one vinylcaprolactam monomer." As the new claim language resolves any ambiguity that may have been present in original claim 29, Applicants respectfully request withdrawal of this rejection.

D. Claim 30

The Examiner has rejected claim 30 "as being confusing." (Office Action dated May 22, 2001, page 3, line 17.) Applicants respectfully traverse this rejection.

Applicants have constructed new claim 88, which corresponds with original claim 30, to encompass at least both the possibilities expressed by the Examiner. Accordingly, Applicants respectfully request withdrawal of this rejection.

V. Rejections Under 35 U.S.C. § 102

Claims 1-5, which correspond with new claims 38-43 and 101-103, have been rejected as anticipated by European Patent No. EP 0 551 749 to *Lee et al.* ("*Lee*") and claims 1, 29, and 30, which correspond with new claims 38, 41, and 86-88, as anticipated by U.S. Patent No. 4,402,977 to *Grollier et al.* ("*Grollier*") under 35 U.S.C. § 102(b) for the reasons set forth on page 4-5 of the present Office Action. Applicants respectfully traverse these rejections for at least the reasons set forth below.

The Examiner asserts that *Lee* anticipates claims 1-5 because *Lee* teaches "a hair treatment composition comprising a water-insoluble polymeric resin and a water-soluble amphoteric polymer." (Office Action dated May 22, 2001, page 4, paragraph 11.) Additionally, the Examiner asserts that *Grollier* anticipates claims 1, 29, and 30 because "Grollier discloses compositions for the treatment of keratin fibers based on amphoteric polymers and anionic polymers." (Office Action dated May 22, 2001, page 4, paragraph 12.) However, as neither of these teachings is sufficient in itself to anticipate Applicants' claims, Applicants respectfully disagree with these grounds for rejection.

Anticipation requires that a reference "clearly and unequivocally disclose the claimed compound or direct those skilled in the art to the compound without any need for picking, choosing, and combining various disclosures" *In re Arkley*, 455 F.2d 586, 587, 172 U.S.P.Q. 524, 526 (C.C.P.A. 1972) (emphasis supplied). *Lee* and *Grollier* do not satisfy these requirements of anticipation.

Applicants' claimed combination is not anticipated by either *Lee* or *Grollier* because both references fail to teach Applicants' genus of combinations. "A generic claim cannot be allowed to an applicant if the prior art discloses a species falling within the claimed genus." M.P.E.P. § 2131.02 (citations omitted). The genus of combinations as taught by *Lee* comprises:

(i) a water-insoluble, dispersible polymeric resin having a viscosity of less than about 2 centipoise at 25°C when 10% is dispersed in water, present in an effective amount for setting hair; and (ii) a water-soluble amphoteric polymer present in an effective amount for setting hair.

(Lee page 2, lines 56-58.) Additionally, the genus of combinations as taught by *Grollier* comprises:

"(a) at least one anionic polymer containing one or more carboxyl or sulphonyl groups, and (b) at least one amphoteric polymer containing units A and B randomly distributed in the polymer chain

(*Grollier* col. 1, lines 65-68.)

Neither reference teaches a species, let alone the genus, within Applicants' genus of combinations of "at least one tacky polymer having a glass transition temperature (Tg) of less than 20°C and at least one fixing polymer having a glass transition temperature (Tg) greater than 15°C." (Applicants' claim 38.) Because Applicant's combination is not set forth "clearly and unequivocally" in either *Lee* or *Grollier*, the references had not placed Applicants' invention in the public domain.

Moreover, "[a] reference which provides nothing more than a starting point for further experiments which might possibly lead in the direction of the invention would not qualify as an anticipation." *Idacon, Inc. v. Central Forest Products, Inc.*, 1986 WL 15837, at *16 (E.D.Okl. 1986). *Lee* and *Grollier* are too general in their teachings and, thus, do not qualify as more than a starting point for further experimentation.

Accordingly, Applicants respectfully submit that the references cited do not anticipate the claimed invention, and request withdrawal of these rejections.

VI. Rejections Under 35 U.S.C. § 103

The Examiner has rejected claims 1-5 and 29-30, which correspond with new claims 38-43, 101-103, and 86-88 under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 5,266,303 to *Myers et al.* ("*Myers*") in view of International Patent No. WO

95/18191 to *Miller et al.* ("*Miller*"). The Examiner contends that "[i]t would have been obvious to one of ordinary skill ... to have substituted branched sulfonate-containing polyesters for linear sulfonate-containing polyesters." (Office Action dated May 22, 2001, page 6, paragraph 17.) Applicants disagree and respectfully traverse this rejection for at least the reasons detailed below.

To establish a *prima facie* case of obviousness, the Examiner bears the burden of establishing *at least* that there exists some suggestion or motivation to modify or combine reference teachings. M.P.E.P. § 2143. The proposed substitution is not suggested by the references cited by the Examiner because *Myers* explicitly teaches away from the use of branched sulpho-polyesters and *Miller* is nonanalogous art.

A. Myers Teaches Away From the Proposed Substitution

In an obviousness determination, the Examiner must consider the reference teachings as a whole, taking into consideration "portions that would lead away from the claimed invention." M.P.E.P. § 2141.02 (emphasis in original) (citation omitted). *Myers* teaches that "[s]light variations in the condensation temperatures and/or times results in branched polymers having molecular weights which exceed the desired values and which have poor film forming characteristics." (*Myers* col. 1, line 65—col. 2, line 3.)

Applicants respectfully submit that this explicit disclosure in the reference teaches one of ordinary skill in the art away from varying the specific polymers of *Myers*, especially away from using branched polymers. Thus, *Myers* teaches away from substituting its sulphonate-containing linear polyester with a branched sulphonate-containing polyester.

Accordingly, Applicants submit that *Myers*, as a whole, does not suggest the Examiner's proposal.

B. Miller Is Not Analogous Art

Additionally, an Examiner's rejection is only proper when it relies upon analogous art. M.P.E.P. § 2141.01. An analogous-art reference "must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." M.P.E.P. § 2141.01 (citations omitted). *Miller* is not analogous art for at least the following reasons.

1. Miller is not in the field of Applicants' endeavor

The field of Applicants' endeavor is cosmetics. Applicants recite in their claims the term "cosmetic composition." (For example, claim 38.) *Miller*, to the contrary, is directed to adhesives. In particular, *Miller* is concerned with hot melt adhesives. (*Miller*, page 1, lines 4-10.) Applicants respectfully submit that because *Miller* does not concern cosmetics, it is not analogous art.

2. <u>Miller is not reasonably pertinent to the problem</u>

Further, *Miller* is not reasonably pertinent to the particular problem Applicants and *Myers* are concerned with. One aspect, for example, of Applicants' invention sought to develop hairstyling compositions that "offer good cosmetic properties, in particular in terms of disentanglement, softness and feel." (Specification, page 3, lines 12-19.) *Myers* seeks to avoid matting of the hair (*Myers*, col. 1, lines 54-58) and to

avoid prolonged washing that is usually associated with the removal of linear sulphopolyesters (*Myers*, col. 1, lines 40-49). *Miller* is directed to adhesives that will not impair the ability to recycle paper to which the adhesive is applied. (*Miller*, page 1, lines 4-13.) Applicants submit that the ability to recycle paper is not reasonably pertinent to problems associated with hairstyling cosmetic compositions.

Further, Applicants point out the particular technique that is used by *Miller* in applying its compositions. For example, *Miller* provides "[t]he adhesive composition according to the present invention is applied to one substrate with a second substrate being placed on top of the adhesive forming an article having the adhesive laminated between two substrates." (*Miller*, page 19, lines 10-14.) Further, for example, *Miller* prefers to apply its compositions at a temperature of 150-200°C. (*Miller*, page 19, lines 27-29.) Applicants respectfully submit that this type of application would be obviously detrimental to a substrate, such as, for example, hair. Applicants respectfully submit that, in view of the teachings of *Miller*, which is directed to a distinctly different problem, one of skill in the art of cosmetics would not have logically considered the reference in attempting to solve a problem in the cosmetic arts. Accordingly, Applicants respectfully request withdrawal of this rejection.

VII. Conclusion

In view of the foregoing amendments and remarks, Applicant respectfully requests the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,

GARRETT & DUNNER, L.L.P.

Dated: August 22, 2001

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Attachment: Appendix to Amendment

LAW OFFICES



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APPENDIX TO AMENDMENT OF August 22, 2001

Version with Markings to Show Changes Made

TECH CENTER 1600/2900

IN THE SPECIFICATION:

Please replace the last full paragraph on page 11, which extends to the first two lines of page 12, of the specification with the following paragraph:

Among the vinylidene monomers containing hydroxyl groups (c), there may be mentioned acrylate monomers containing a terminal hydroxyl group, such as hydroxyethyl acrylate, hydroxyethyl methacrylate, hydroxypropyl acrylate, hydroxyethyl methacrylate, hydroxypropyl methacrylate, hydroxybutyl acrylate or alternatively certain hydroxymethylated derivatives of diacetone acrylamide, for example N-methylolacrylamide, N-methylolmaleamide, N-propanolacrylamide, N-methylol-p-vinylbenzamide.